

Appl. No.: 09/263,918  
Reply to the Examiner's Answer of 1/29/04  
Reply Dated 3/29/2004



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Mark L. Skarpness

Application No.: 09/263,918

Filed: 3/5/1999

For: **METHOD FOR INTERFACING AN  
ATM NETWORK TO A PC BY  
IMPLEMENTING THE ATM  
SEGMENTATION AND REASSEMBLY  
FUNCTIONS IN PC SYSTEM  
SOFTWARE**

Examiner: Soon D. Hyun

Art Group: 2663

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**REPLY BRIEF**

BOX AF  
Assistant Commissioner for Patents  
Washington, DC 20231-9998

Dear Sir:

Appellant submits the following Reply Brief pursuant to 37 C.F.R. § 1.193(b) for consideration by the Board of Patent Appeals and Interferences. The Reply Brief is directed to the new point(s) of argument raised in the Examiner's Answer.

**RESPONSES TO NEW POINTS OF ARGUMENT RAISED IN THE EXAMINER'S  
ANSWER**

**A. Response to Examiner's Assertion that Kwak Teaches a Segmentation and  
Reassembly (SAR) Software Module**

In the Examiner's Answer, the Examiner asserts that the first issue is whether Kwak teaches a SAR software module (Examiner's Answer, page 5, paragraph 1).

The Examiner admits that Kwak does not explicitly show a SAR software module, but only shows a software SAR interface device (SSID) (Examiner's Answer, page 5, paragraph 1). However, the Examiner seems to contend that because Kwak shows a software SAR interface device (SSID) that it must teach SAR software and therefore a SAR software module.

Appellant respectfully disagrees. Kwak only teaches an interface device to some sort of SAR software, i.e. the SSID, and does not explicitly teach or suggest Appellant's very specific claim limitations relating to performing asynchronous transfer mode (ATM) segmentation and/or reassembly (SAR) functions with a *SAR software module implemented in a central processing unit (CPU) of a personal computer*, among other limitations. Appellant has searched Kwak and can find no teaching or suggestion of a SAR software module implemented in a CPU of a personal computer.

In the Examiner's Answer, the Examiner asserts that the second issue is whether the software module is implemented in a CPU (Examiner's Answer, page 5, paragraph 2). The Examiner further contends that Kwak teaches that the CPU processes the SAR using the SSID (Examiner's Answer, page 5, paragraph 2). However, again, Kwak only teaches the use of a software SAR interface device (SSID) and does not specifically teach or suggest a SAR software module implemented in the CPU of a personal computer to accomplish SAR functionality.

Therefore, Appellant respectfully submits that Kwak, as relied upon by the Examiner, does not teach or suggest the limitations of Appellants independent claims directed to performing ATM segmentation and/reassembly (SAR) functions in a CPU of a personal computer utilizing a SAR software module, and thus does not render obvious Appellant's independent claims.

**B. Response to Examiner's Assertion that an ATM Terminal is Equivalent to a Personal Computer**

As the Examiner recognizes Kwak only teaches an ATM terminal and not a personal computer (Examiner's Answer, page 3, emphasis added). However, the Examiner contends that a personal computer performs multimedia communications including voice communications and those of skill in the art would have been motivated to use a personal computer as the ATM terminal. (Examiner's Answer, page 3). The Examiner further reasons that it would have been obvious to one having ordinary skill in the art to use a personal computer as the ATM terminal of Kwak. (Examiner's Answer, page 3).

Particularly, the Examiner asserts that although a PC by itself is not an ATM terminal, that the PC becomes an ATM terminal when the PC is equipped with ATM SAR and related hardware (Examiner's Answer, page 6). Basically, the Examiner argues that it simply would have been obvious to one having ordinary skill in the art to use a personal computer as the ATM terminal of Kwak. (Examiner's Answer, page 6).

Appellant respectfully submits that the Examiner has misconstrued the legal standards regarding obviousness.

For example, in *Ex parte King*, the Examiner rejected claims on the theory that the difference between a general-purpose computer and claims to a special purpose computer could

be supplied by merely placing a suitable program in the general-purpose computer, even though the art contained no such suggestion for the preparation of such a program. The Board disagreed and held that a program for a computer which is not made obvious by prior art, but only by the Applicants' disclosure, is not available to teach the Applicants' invention. The Board held that since most general-purpose computers have the recognized capacity of simulating operations of many other computers or machines by suitable programming, this fact should afford no basis for denial of a patent on all future novel computer configurations which the prior art does not make obvious. See *Ex parte King* 146, U.S.P.Q. 590 (Pat. Off. Bd. App. 1964).

As specifically stated in *Ex parte King*:

In other word, if the difference between a general purpose computer and the claims to a special purpose computer can be supplied by merely placing a suitable program in a general purpose machine then the Examiner would deny a patent even though the art contained no suggestion for the preparation of such a program... We do not agree. To deny patent protection to a novel structure it must be shown that the same was obvious at the time the invention was made. A program for a computer which is not made obvious by the prior art but only by appellants' disclosure is not available to teach appellants' invention. Since most general purpose computers have the recognized capability of simulating operations of many other suitable computers or machines by suitable programming, this fact should afford no basis for denial of a patent on all future novel computer configurations which the art does not make obvious.

This is very similar to the situation of Appellant's claimed invention versus that of Kwak. Appellant's claimed invention relates to performing asynchronous transfer mode (ATM) segmentation and/or reassembly (SAR) functions with a *SAR software module implemented in a central processing unit (CPU) of a personal computer*, among other limitations. On the other hand, Kwak discloses a specialized ATM terminal to perform segmentation and reassembly, and discloses the use of a software segmentation and reassembly interface device (SSID). This

specialized type of ATM terminal is a type of prior art that Appellant's claimed invention was designed to improve upon.

Appellant respectfully submits that the Examiner has clearly erred. Appellant respectfully submits that, as the case law holds, a specialized ATM terminal having a CPU operating in conjunction with a software segmentation and reassembly interface device (SSID) is not sufficient to teach, suggest, or render obvious Appellant's claimed invention relating to a personal computer in which *the CPU of the personal computer implements ATM segmentation and/or reassembly functions utilizing a SAR software module*, as set forth in Appellant's independent claims.

Kwak quite simply does not teach or suggest a personal computer having a SAR software module implemented in the CPU of a personal computer to perform segmentation and/or reassembly functions, along with other limitations.

In fact, as stated in Appellant's patent application, Appellant's invention uses "software implemented in a multipurpose central processing unit to form the segmentation and reassembly functions in a personal computer...the use of software to perform the segmentation and reassembly reduces the cost..." (Appellants' patent application, page 6, paragraph 1).

Thus, embodiments of the invention relating to using a software module to perform these functions, *implemented in the CPU of a personal computer*, provide advantages over the prior art such as Kwak. Appellant respectfully submits that the implementation of functionality in a general purpose computer should not be rendered obvious solely by an implementation of such functionality in a specialized ATM terminal, when there is no teaching or suggestion to do so.

See generally *Ex parte King* 146 U.S.P.Q. 590 (Pat. Off. Bd. App. 1964).

As should be noted an ATM terminal, such as a networking terminal, is very different from a general-purpose personal computer that can be programmed, easily updated with new programs, is generally low cost in nature, is easily replaceable, etc. There is quite simply no motivation to alter Kwak's ATM terminal that performs ATM functions, and that works well for its intended purpose, to, in hindsight, try to recreate Appellant's invention as defined by Appellant's independent claims.

In fact, Appellant's invention is directed towards overcoming the limitations associated with higher cost ATM type terminals, by utilizing general-purpose personal computers. The only rationale given for modifying Kwak is that it "would have been obvious" to one of ordinary skill in the art to modify Kwak to obtain the claimed invention by merely utilizing a personal computer instead. This is insufficient as a matter of law and is classic impermissible hindsight.

Therefore, Appellant respectfully submits that Kwak neither alone, nor in combination with the skill in the art at the time of the invention, would have rendered obvious Appellant's independent claims 1, 5, 9, and 14 directed to performing ATM segmentation and/or reassembly (SAR) functions in a CPU of a personal computer utilizing a SAR software module.

Accordingly, Appellant respectfully submits that a prima facie case of obviousness has not been met and Appellant respectfully requests that the rejection of independent claims 1, 5, 9, and 14 be reversed, and that independent claims 1, 5, 9, and 14 be allowed.

**Conclusion**

For the foregoing reasons, Appellant respectfully submits that claims 1, 4, 5, and 7-16 are not rendered obvious by Kwak, and therefore are patentable. Accordingly, Appellant respectfully requests that the Board enter a decision overturning the Examiner's rejections of all pending claims and hold that the claims are not rendered obvious by the cited prior art reference and are patentable.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP



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Dated: March 29, 2004

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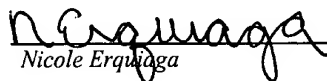
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Nicole Erquaga

3/29/2004

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